

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A gas discharge lamp for ~~the a~~
wavelength range of at least one of extreme ultraviolet radiation
~~and/or and~~ soft X-ray radiation with comprising:

a discharge space;

at least two electrodes ~~(1, 2)~~ for generating a radiation-
emitting plasma ~~(8)~~ in the ~~intervening~~ discharge space ~~(6)~~, ~~one;~~
and

an outer region;

wherein a first electrode of said electrodes is near a side
where the radiation is emitted, and a second of said electrodes (1,
2) having a continuous opposite said first electrode has an opening
(4) to an adjoining the outer region (9), such that charge carriers
can be generated in said outer region ~~(9)~~ and can be transported
through said opening ~~(4)~~ into the discharge space ~~(6)~~,

~~characterized in that and wherein the electrode-opening (4) narrows~~
~~in the a direction of from the discharge space to the outer region~~
~~(9).~~

2. (Currently Amended) ~~A~~ The gas discharge lamp as claimed in
claim 1, characterized in that further comprising means for a pre-
ionization of gas in the outer region (9) are provided.

3. (Currently Amended) A gas discharge lamp ~~as claimed in~~
~~claim 1 or 2, characterized in that the electrodes are for a~~
wavelength range of at least one of extreme ultraviolet radiation
and soft X-ray radiation comprising:

a discharge space;

at least two electrodes for generating a radiation-emitting
plasma in the discharge space; and

an outer region;

wherein one of said at least two electrodes has an opening to
the outer region such that charge carriers can be generated in said
outer region and can be transported through said opening into the
discharge space, and wherein the opening narrows in a direction
from the discharge space to the outer region;

wherein a first portion of at least one of the two electrodes is manufactured from a material in their opening regions which is less prone to erosion than is the a remaining electrode material portion.

4. (Currently Amended) A The gas discharge lamp as claimed in claim 1 ~~any one of the claims 1 to 3, characterized in that an electrode, wherein the~~ opening is provided with a continuous or stepped transition.

5. (Currently Amended) A The gas discharge lamp as claimed in ~~any one of the claims 1 to 4, characterized in that claim 1,~~ wherein a constriction is present inside the electrode opening.

Claim 6 (Canceled)

7. (New) A gas discharge lamp:
a discharge space;
an outer region;
a first electrode in the discharge space near a side where radiation is emitted;

a second electrode opposite the first electrode, the second electrode having an opening to the outer region such that charge carriers can be generated in the outer region and can be transported through the opening into the discharge space, and wherein the opening narrows in a direction from the discharge space to the outer region.

8.(New) The gas discharge lamp of claim 7, further comprising means for a pre-ionization of gas in the outer region.

9.(New) The gas discharge lamp of claim 7, wherein a first portion of at least one of the first electrode and the second electrode is manufactured from a material which is less prone to erosion than a remaining portion.

10.(New) The gas discharge lamp of claim 7, wherein the opening is provided with a continuous or stepped transition.

11.(New) The gas discharge lamp of claim 7, wherein a constriction is present inside the opening.